



Health  
Canada

Santé  
Canada

Your health and  
safety... our priority.

Votre santé et votre  
sécurité... notre priorité.

Proposed Maximum Residue Limit

PMRL2015-39

# S-metolachlor

*(publié aussi en français)*

**25 September 2015**

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

Publications  
Pest Management Regulatory Agency  
Health Canada  
2720 Riverside Drive  
A.L. 6607 D  
Ottawa, Ontario K1A 0K9

Internet: [pmra.publications@hc-sc.gc.ca](mailto:pmra.publications@hc-sc.gc.ca)  
[healthcanada.gc.ca/pmra](http://healthcanada.gc.ca/pmra)  
Facsimile: 613-736-3758  
Information Service:  
1-800-267-6315 or 613-736-3799  
[pmra.infoserv@hc-sc.gc.ca](mailto:pmra.infoserv@hc-sc.gc.ca)

**Canada**

ISSN: 1925-0835 (print)  
1925-0843 (online)

Catalogue number: H113-24/2015-39E (print version)  
H113-24/2015-39E-PDF (PDF version)

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2015

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.

Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of new uses on cucurbit vegetables (Crop Group 9) to the product labels of DUAL Magnum® and DUAL II Magnum®, containing technical grade S-metolachlor, is acceptable. The specific uses approved in Canada are detailed on the labels of DUAL Magnum® and DUAL II Magnum®, *Pest Control Products Act* Registration Numbers 25728 and 25729, respectively.

The evaluation of this S-metolachlor application indicated that the end-use product has value and the human health and environmental risks associated with the new uses are acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Consultation on the proposed MRLs for S-metolachlor is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by the Canada's Notification Authority and Enquiry Point.

The proposed MRLs, to be added to the MRLs already established for S-metolachlor, are as follows.

**Table 1 Proposed Maximum Residue Limits for S-metolachlor**

| Common Name   | Residue Definition                                                                                                                                                                                                                                | MRL (ppm) <sup>1</sup> | Food Commodity                                  |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------------------|
| S-metolachlor | 2-chloro- <i>N</i> -(2-ethyl-6-methylphenyl)- <i>N</i> -[(1 <i>S</i> )-2-methoxy-1-methylethyl]acetamide, including the metabolites 2-[(2-ethyl-6-methylphenyl)amino]-1-propanol and 4-(2-ethyl-6-methylphenyl)-2-hydroxy-5-methyl-3-morpholinone | 0.5                    | Cucurbit vegetables (Crop Group 9) <sup>2</sup> |

<sup>1</sup> ppm = parts per million

<sup>2</sup> The proposed MRLs of 0.5 ppm will replace the currently established MRLs of 0.13 ppm for cucumbers and 0.10 ppm for melons (CSG 9A), pumpkins, and winter squash.

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's website.

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act*, both for pesticides or for food commodities.

### **International Situation and Trade Implications**

S-metolachlor is an active ingredient that is concurrently being registered in Canada and the United States for use on cucurbit vegetables. The MRLs proposed for S-metolachlor in Canada are the same as corresponding tolerances to be promulgated in the United States.

Once established, the American tolerances for S-metolachlor will be listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide.

Currently, there are no Codex MRLs<sup>1</sup> listed for S-metolachlor in or on any commodity on the Codex Alimentarius Pesticide Residues in Food website.

### **Next Steps**

The PMRA invites the public to submit written comments on the proposed MRLs for S-metolachlor up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

---

<sup>1</sup> The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

## Appendix 1

### Summary of Field Trial Data Used to Support the Proposed Maximum Residue Limits

Residue data for S-metolachlor in summer squash and cantaloupe were submitted to support the domestic use of DUAL Magnum<sup>®</sup> and DUAL II Magnum<sup>®</sup> on cucurbit vegetables. In addition, previously reviewed residue data from field trials conducted in/on cucumbers were reassessed in the framework of this petition.

### Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for S-metolachlor was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the proposed MRLs for cucurbit vegetables.

**Table A1 Summary of Field Trial and Processing Data Used to Support MRLs**

| Commodity     | Application Method/ Total Application Rate (kg a.i./ha) <sup>1</sup> | Preharvest Interval (days) | Maximum Residues (ppm) | Minimum Residues (ppm) |
|---------------|----------------------------------------------------------------------|----------------------------|------------------------|------------------------|
| Cucumbers     | Foliar broadcast/ 1.12 – 1.44                                        | 32 – 38                    | <0.13                  | <0.13                  |
| Summer Squash | Foliar broadcast/ 1.30 – 1.36                                        | 21 – 36                    | <0.13                  | <0.13                  |
| Cantaloupe    | Foliar broadcast/ 1.42 – 1.49                                        | 27 – 33                    | 0.170                  | <0.13                  |

<sup>1</sup> kg a.i./ha = kilograms of active ingredient per hectare

Following the review of all available data, the MRLs as proposed in Table 1 are recommended to cover residues of S-metolachlor. Residues of S-metolachlor in these crops at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.